

METHOD FOR PCI EXPRESS POWER MANAGEMENT USING A PCI PM MECHANISM IN A COMPUTER SYSTEM

Abstract

A method for PCI Express Power Management using a PCI PM mechanism in a computer system. The computer system includes a PCI PME (Power Management Event) controller and a PCI Express Root Complex. The method includes converting a plurality of PM_PME packets generated by the PCI Express Root Complex into a Pseudo-PME signal, a first PM_PME packet of the plurality of PM_PME packets asserting the Pseudo-PME signal. A Pseudo-PME line electrically connected with a PME input of the PCI PME controller and the PCI Express Root Complex is provided for transmitting the Pseudo-PME signal to the PCI PME controller. The PME input receives PME signals generated by PCI-compliant devices through a PCI Bus of the computer system. The method further includes de-asserting the Pseudo-PME signal. The de-assertion of the Pseudo-PME signal follows the assertion of the Pseudo-PME signal by a predetermined time interval.